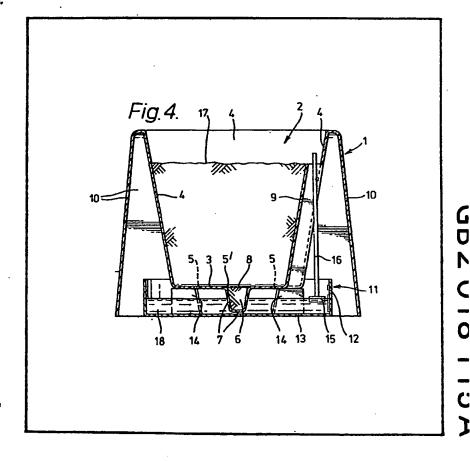
(12) UK Patent Application (19) GB (11) 2 018 115 A

- (21) Application No 7911580
- (22) Date of filing 3 Apr 1979
- (23) Claims filed 3 Apr 1979
- (30) Priority data
- (31) 13276/78
- (32) 5 Apr 1978
- (31) 27388/78
- (32) 20 Jun 1978
- (33) United Kingdom (GB)
- (43) Application published 17 Oct 1979
- (51) INT CL²
- A01G 9/02 27/00
- (52) Domestic classification A1E 4 8
- (56) Documents cited
- GB 1192431
 - GB 1106222
 - GB 988351
 - GB 654013
 - GB 387829
 - GB 387829 GB 385854
- (58) Field of search
- A1E
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(54) Plant Holder

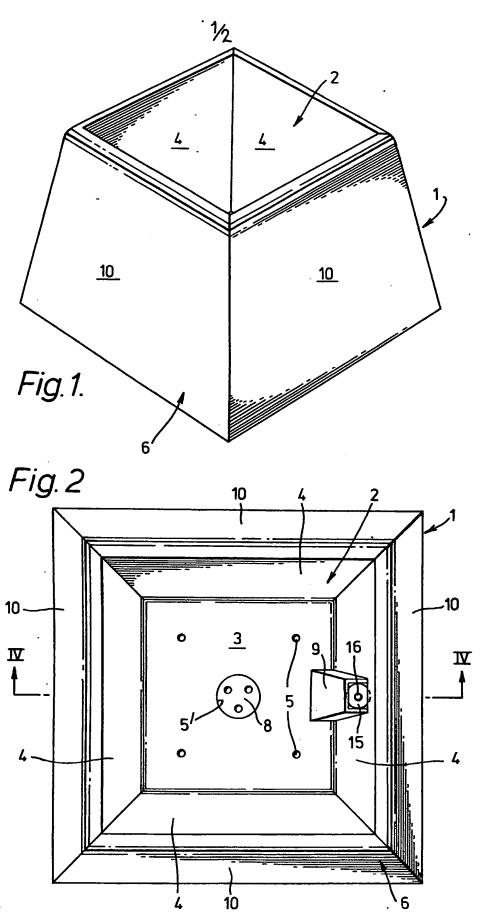
(57) A plant holder comprises a plant pot (1) and a water retention tray (11). The plant pot has a soil-retaining portion (2) having a perforate base (3) and a side wall (4), a supporting wall (10) surrounding the side wall of the

soil-retaining portion (2) and extending below the level of the perforate base (3) to support the base above the level of a surface on which the pot (1) is placed in use. The water retention tray (11) fits removably within the supporting wall (10) and surrounds the lower end of the side wall (4).

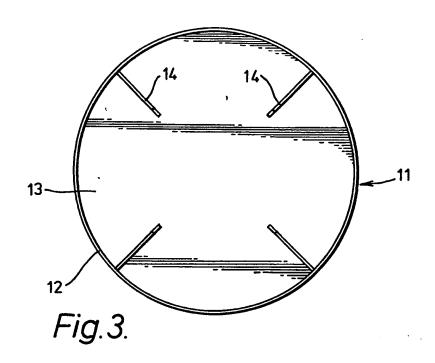


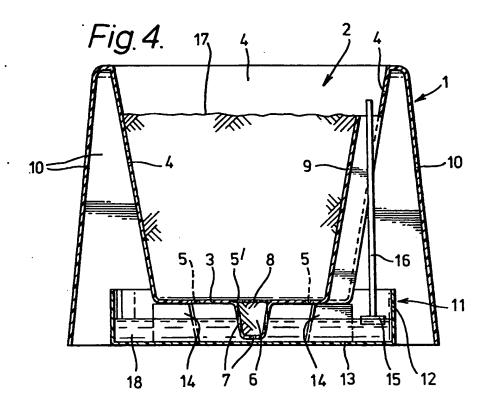
The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy





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SPECIFICATION Plant Holder

The present invention relates to plant holders. Conventional plant pots manufactured in 5 unglazed pottery have started to be replaced, in recent years, by plastic pots of substantially similar design. These pots usually comprise an inverted frusto-conical sleeve with one or more openings in the base to allow water to pass therethrough. Such pots are particularly unsightly and frequently a second, larger, ceramic pot is used to contain the plastic pot to reduce this unsightliness and also to enable retention of water fed to the plant in the pot, particularly when the plant in the pot is of a type which requires watering from the bottom rather than the top. Alternatively, where such expense is to be avoided a plastics tray or even a saucer is used to retain the water, the pot standing in the tray or saucer.

According to the present invention a plant holder comprises a plant pot and a water retention tray, the plant pot comprising a soilretaining portion having a perforate base and a side wall, and a supporting wall surrounding the 25 side wall of the soil-retaining portion and extending below the level of the perforate base to support the base above the level of a surface on which the pot is placed in use, the water retention tray fitting removably within the support wall and surrounding the lower end of the soil-retaining portion side wall.

Such a plant holder is much more aesthetically pleasing as the water retention tray, fitting within the confines of the supporting wall, cannot be 35 seen. However, due to the construction of the pot the water retention tray still fullis its primary function which is to retain any excess water when a plant supported in the soil-retaining portion is watered, or, to retain water to provide a self-40 watering facility.

Preferably the supporting wall of the plant pot is frusto-conical and tapers upwardly and the side wall of the soil-retaining portion is frusto-conical and tapers downwardly, the two walls being 45 connected at the top. With such a construction the plant pots can be nested one within another to reduce storage space. The plant pots can most suitably be manufactured by injection moulding a synthetic plastics material.

As an additional feature, one side of the plant pot can include a channel-sectioned protrusion extending inwardly and tapering upwardly so as not to impede nesting of one plant pot with another, the projection being open at the top to 55 enable a level indicating rod attached to a float to extend through the top of the projection to provide an indication of the water level within the water-retention tray below. This feature is particularly useful with large plant pots where the 60 weight of the soil within the soil-retaining portion 125 may be such as to cause difficulities in lifting the plant holder. The open top of the protrusion may also be used for providing water direct to the water retention tray if the plant or plants within

65 the pot are of a species which requires to be watered only from below.

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A further additional feature is the provision, in the perforate base of the soil-retaining portion, of a chamber opening to the soil-retaining portion and extending below it, the base and/or the walls of the chamber being perforate to enable the passage of water therethrough. In use, the chamber can be arranged to extend into the water in the water retention tray and, by capillary action through the soil or other growth medium, filling the chamber, the water can be fed from the tray to the roots of the plant or plants. Preferably, the chamber is frusto-conical, tapering downwards, again to aid stackability.

With some plants it may be advisable to reduce the quantity of water fed from the tray to the soil in the soil-retaining portion and to achieve this a moisture reducer, preferably in the form of a flat, perforated disc, can be positioned to cover the chamber after it has been filled with soil; the reduction in the effective cross-sectional area across which water can be transferred to the soilretaining portion from the chamber, thus reducing the amount of water fed to the roots of the plant. 90 A range of moisture reducers could be provided with each plant holder with suitable instructions for use with different plants which require differing amounts of water. These could be colour-coded in order to simplify instructions to 95 users.

Preferably, the water retention tray comprises a synthetic plastics material and includes upstanding supporting elements arranged to abut or lie closely adjacent to the underneath of the base of the soil-retaining portion of the plant pot in use, to support the weight of the soil and plants in the pot. This is especially useful when the plant holder is of a large size as is commonly used in the entrance halls of large office blocks and hotels. The supporting elements may be provided 105 by upstanding webs formed integrally with the base of the water retention tray, for example along radial lines extending from the centre of the tray. To allow for use with a plant pot having a chamber at the centre of its base, the radial webs extend inwardly to a point short of the centre to allow sufficient room for the chamber to project towards the bottom of the water retention tray. The plant holder may have virtually any plan shape, but the preferred ones will be square, 115 rectangular, circular and oval.

One example of a plant holder according to the present invention will now be described with reference to the accompanying drawings in which:

120 Figure 1 is a perspective view of the plant

Figure 2 is a plan view of the plant holder; Figure 3 is a plan view of the water retention tray; and

Figure 4 is a cross-sectional view on the line IV-IV in Figure 2.

The plant pot 1 has a substantially square plan as can be seen most clearly from Figure 2, and

comprises a soil-retaining portion 2 which has a base 3 and side walls 4. Together, the walls 4 form an inverted frustum. The base 3 may include perforations 5 as required, but preferably just includes a single opening 5' which leads into a frusto-conical chamber 6, the sides and base of which are perforated by holes and slots 7. The opening 5' is stepped as shown to enable a disc 8 to be supported across the top of a chamber to reduce water drawn up through the soil, in use. This may be required with plants of particular varieties which require only a moderate amount of water.

On one of the side walls 4 an elongate
protrusion 9 is provided of channel-shaped crosssection and extending to a point short of the top
of the wall 4 and tapering upwardly. The soilretaining portion 2 is supported by surrounding
supporting walls 10 which again form a frustum,
but tapering oppositely to the frustum formed by
the side walls 4 so that one plant pot may be
stacked within another to save space when
storing.

As can be seen most clearly from Figure 4, 25 internally of the supporting walls 10 there is positioned a water retention tray 11, but which is circular and comprises a surrounding wall 12 and a base 13. Extending along diameters of the water retention tray are walls 14 which extend to 30 points remote from the centre of the tray in order to enable the chamber 6 in the plant pot to extend to a position closely adjacent the bottom of the tray. The walls 14 are shorter than the side walls 12 and are substantially the same height as the 35 distance between the level of the base 3 of the pot and the bottom of the surrounding supporting walls 10, so as to provide support for the base if this is required when the pot has large dimensions and the mass of soil contained in the soil retaining 40 portion is such that additional support is required.

A float 15 having a marker rod 16 floats on the water in the water retention tray in such a position that the rod extends through the open end of the channel-shaped protrusion to provide an indication of the level of water within the tray. The marker rod can be calibrated appropriately. Preferably the level of soil within the pot is arranged to coincide with the top of the channel-shaped protrusion.

In use, the chamber 6 and the soil-retaining portion 2 are filled with soil up to the required level 17 with one of the perforated discs being interposed or not at the top of the chamber depending on the type of plant to be grown. The water retention tray can be filled with water up to a suitable level 18 and the pot positioned over the top of it. If, however, the holder is of very large dimensions then water can be supplied through the opening at the top of the channel-shaped
protrusion directly to the water retention tray thus avoiding the need for lifting of the pot.

Both the plant pot and water retention tray are injection moulded from a synthetic plastics material and, if required, the water-retention tray may be formed with a frusto-conical wall so that the trays as well as the pots can be stacked on top of one another. The holders may be manufactured in a wide range of sizes, plan shapes and colours and the example illustrated is merely one of many which are envisaged.

Claims

1. A plant holder comprising a plant pot and a water retention tray, the plant pot comprising a soil-retaining portion having a perforate base and a side wall, and a supporting wall surrounding the side wall of the soil-retaining portion and extending below the level of the perforate base to support the base above the level of a surface on which the pot is placed in use, the water retention tray fitting removably within the support wall and surrounding the lower end of the soil-retaining portion side wall.

A plant holder according to claim 1, wherein the supporting wall of the plant pot is frustum-shaped and tapers upwardly and wherein the side wall of the soil-retaining portion is frustum-shaped and tapers downwardly, the two walls being connected to one another at the top.

3. A plant holder according to claim 1 or claim 90 2, wherein the side wall of the soil-retaining portion has a channel-sectioned protrusion extending inwardly of the soil-retaining portion and tapering upwardly, the projection being open at the top.

4. A plant holder according to claim 3, further including a float having a level-indicating rod attached thereto, in use the rod being arranged to extend through the open top of the projection to provide an indication of water level within the water-retention tray below.

5. A plant holder according to any of the preceding claims, wherein the perforate base of the soil-retaining portion has a chamber opening thereto, the chamber being formed below the base and having perforate wall to enable the passage of water therethrough.

A plant holder according to claim 5, wherein the chamber is frustum-shaped and tapers downwardly.

7. A plant holder according to claim 5 or claim 6, further including one or more flat, perforated discs of a size to be positioned within the top of the chamber to reduce the effective cross-sectional area across which water can be transferred to the soil-retaining portion from the chamber.

8. A plant holder according to any of the preceding claims, wherein the water retention tray includes one or more upstanding supporting elements arranged to abut or lie closely adjacent

to the underneath of the base of the soil-retaining portion of the plant pot in use, to support the weight of the soil and plants in the pot. 9. A plant holder according to claim 1,substantially as described with reference to the accompanying drawings.

Printed for Her Majesty's Stationery Office by the Courier Press, Learnington Spe, 1979, Published by the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

DERWENT-ACC-NO:

1979-J8800B

DERWENT-WEEK:

197942

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TITLE:

Self watering plant container - has inner soil carrying cup supported above separate water dish by integral outer

wall

INVENTOR: CORRIE, F

PATENT-ASSIGNEE: CORRIE F[CORRI]

PRIORITY-DATA: 1979GB-0011580 (April 3, 1979), 1978GB-0013276 (April 5, 1978)

, 1978GB-0027388 (June 20, 1978)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE PAGES

MAIN-IPC

GB 2018115 A

October 17, 1979

N/A

000 N/A

INT-CL (IPC): A01G009/02, A01G027/00

ABSTRACTED-PUB-NO: GB 2018115A

BASIC-ABSTRACT:

The sel watering plant pot (1) has an outer wall (10) of frusto-pyramidal form supporting an inverted frusto-pyrmidal inner wall (4) containing soil. The inner base surface (5) is spaced above a support surface by the outer wall height.

The base is perforated or has a depending cup chamber (7) with perforated walls. Placed underneath the base and within the outer wall is a water dish (11). The water is absorbed into the soil through the perforations. A marker float on the water extends through a recess (9) in the inner walls.

TITLE-TERMS: SELF WATER PLANT CONTAINER INNER SOIL CARRY CUP SUPPORT **ABOVE**

SEPARATE WATER DISH INTEGRAL OUTER WALL

DERWENT-CLASS: P13

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